

WHAT IS CLAIMED IS:

1. A device for controlling a temperature of an injection molding machine using a temperature controller comprising:

5 a first and a second pump for forcedly supplying feed water from a cooling tower to a pipe within the injection molding machine and a heater by their pumping actions, respectively, the heater heating the feed water supplied from the cooling tower by the pumping action of the first pump and
10 supplying the heated water to the pipe within the injection molding machine;

a first opening and closing means provided between the pipe within the injection molding machine and the heater for regulating feeding of the water from the heater to the pipe
15 within the injection molding;

a second opening and closing means provided between the pipe within the injection molding machine and the first pump for regulating returning of the water from the pipe within the injection molding machine to the first pump;

20 a third opening and closing means provided between the pipe within the injection molding machine and the second pump for regulating feeding of the water from the second pump to the pipe within the injection molding machine;

a fourth opening and closing means provided between the
25 pipe within the injection molding machine and the cooling tower

for regulating discharging of the water from the pipe within the injection molding machine to the cooling tower;

temperature sensors for detecting temperatures of the feed water from the cooling tower, the hot water within the heater

5 and the cooling water within the injection molding machine; and

control means for controlling operations of the injection molding machine and controlling actions of the pumps, the heater and the first to fourth opening and closing means depending on temperature values of the temperature sensors and
10 setting values of a timer.

2. A device according to claim 1, wherein each of the first to the fourth opening and closing means is a solenoid valve.
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3. A device according to claim 1 or 2, wherein a check valve is provided at a rear end of the solenoid valve.

4. A device according to claim 1, wherein the second and
20 the fourth opening and closing means further includes a manifold, respectively.

5. A device according to claim 1, wherein the control means controls the temperatures of the injection molding
25 machine by selectively opening or closing a plurality of the

opening and closing means to regulate the inflow or discharge of the cooling water into or from the injection molding machine.

- 5 6. A method for controlling a temperature of an injection molding machine using a temperature controller, the method comprising the steps of:

controlling a temperature of feed water fed from a cooling tower to the injection molding machine by actuating a
10 temperature controller for heating the water; and then

controlling a temperature of the injection molding machine by opening or closing a plurality of opening and closing means to regulate feeding of the water from the cooling tower to the injection molding machine.

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7. A method according to claim 6, wherein the step of
controlling the temperature of the injection molding machine is performed by selectively opening or closing a plurality of the opening and closing means to regulate the inflow or discharge
20 of the cooling water into or from the injection molding machine.